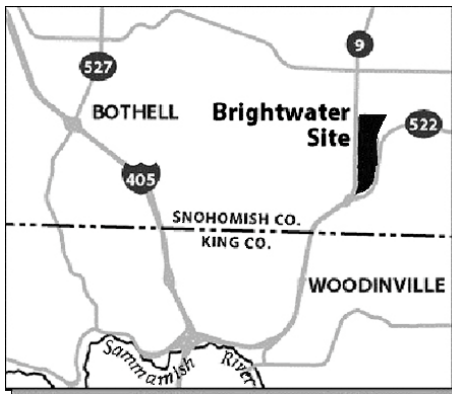


## Seismic Design: King County partners with USGS

The U.S. Geological Survey (USGS) and King County are entering into an agreement to study a possible seismic fault-related feature on the Brightwater wastewater treatment plant site. The project involves digging and analyzing a trench at the far north end of the plant site at State Route 9 and Highway 522. The study seeks to put a feature known as “Lineament 4” into a regional geologic context so King County can ensure the adequacy of foundation designs, various setbacks, and seismic design at the Brightwater site. Work on the Brightwater site will take place in late September. King County is paying about \$370,000 for the study, and the USGS is paying about \$70,000.



### Background

In August a hearing examiner upheld the adequacy of the Brightwater Final Environmental Impact Statement and added the condition that the county do trenching on the site to further determine earthquake risk to future Brightwater structures.

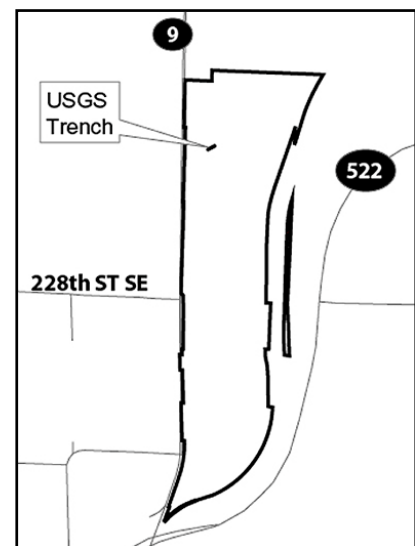
Even before the ruling, Brightwater was being designed as if there were an earthquake fault on the site.

King County’s Wastewater Treatment Division is assembling and coordinating a team of seismic and geology experts to support USGS efforts in trenching and mapping of Lineament 4. Besides the USGS and King County staff, the team consists of regionally recognized experts from AMEC, Aspect, Shannon & Wilson, and PanGeo. CH2M HILL, the treatment plant engineering firm, has also involved their subcontractors with expertise in this area including Adolfson & Associates, Reid Middleton, Pharos, and Larson and Associates Archeological Services.

### Trenching

King County contractors will dig and geologically map a 100-foot-long trench in the former Northshore School District property (Parcel 2) now owned by the county. The investigation will help determine if Lineament 4 is related to a seismic fault line. The USGS selected the specific trenching site as the one most likely to provide the information to determine this possibility.

The trench is expected to be less than 7 feet deep and about 15 feet wide. Wetlands and buffer zones on the property will be avoided. If necessary, a dewatering system will enable the excavation and study to be conducted in dry soil. Excavation and analysis of the trench will take less than one week, and the trench will be open no longer than two weeks. After completion of the geologic mapping, the contractor will haul back excavated material, place it in the trench, and restore the disturbed areas of the property by hydroseeding to minimize erosion.



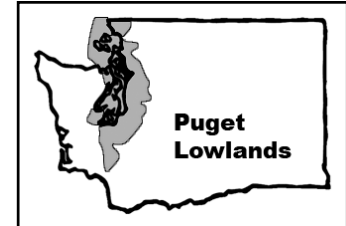
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## Seismic Design: King County partners with USGS ...continued

The USGS, working with the county experts, selected the trenching site that would provide the best geologic mapping information based on their experience and knowledge of the local geology. USGS may excavate additional trenches off the Brightwater site.

The report from this project will provide information to USGS's continuing studies to evaluate potentially active faults throughout the Puget Lowland. The Puget Lowland consists of a broad, low-lying region between the Cascade Range to the east and the Olympic Mountains and Willapa Hills to the west.



### Safety

There will be limited and controlled access to the trenching site. For the safety of workers, the public and the environment, and to ensure the integrity of the geologic analysis, the trenching site will be fenced off and guarded by security while the study is under way.

The Brightwater plant will protect public health and water quality by treating wastewater from homes, businesses, schools and offices in south Snohomish County and north King County. Wastewater from the growing population in the Brightwater service area is now treated at plants miles away in Renton and Seattle.

King County's Wastewater Treatment Division serves 18 cities, 16 local sewer agencies and more than 1.4 million residents in King, Snohomish and Pierce counties. Now operated by King County, the regional utility has been preventing water pollution for nearly 40 years.

**For more information on Brightwater, or to be added to our mailing list, please contact the Brightwater project team:**

**Phone:** 206-684-6799, toll-free at 1-888-707-8571, 711 TTY

**E-mail:** [brightwater@metrokc.gov](mailto:brightwater@metrokc.gov)

**Web:** <http://dnr.metrokc.gov/wtd/brightwater/>

**This information is available in alternative formats on request by calling 206-296-1328 or Relay Service 711**



**King County**